## AMONAL FIRE ACHIEVE

## Coffee Break Training - Fire Protection Series

## **Commercial Cooking: Cooking Hood Luminaires**

No. FP-2009-5 February 3, 2009

**Learning Objective:** The student shall be able to identify the code and listing requirements for luminaires installed in commercial cooking hoods.

The environment beneath a commercial cooking hood is the perfect place for an unwanted fire to occur: grease-laden vapors suspended in warm air coming into contact with open flames and electrical appliances.

One potential ignition source that is addressed by NFPA 70<sup>®</sup>, National Electrical Code<sup>®</sup>, is the installation of the wiring and the equipment forming the parts of luminaires (fixtures) beneath the hood where grease might accumulate in combustible mixtures.

Where illumination is provided inside a commercial cooking hood, luminaires that are identified by Underwriters Laboratories or another approved independent lab for use within the hood can be installed as long as the temperature limitations of the luminaire, the conductors, and the wiring method connected to the luminaire are not exceeded.

Luminaires intended for use in commercial cooking exhaust ducts or hoods are marked "SUITABLE FOR USE WITHIN COMMERCIAL COOKING HOODS" and "MOUNT A MINIMUM OF 1.2 M (4 FT) ABOVE COOKING SURFACE."

The luminaire must be designed and constructed so that all exhaust and/or cooking vapors, grease, and oil are excluded from the lamp and wiring compartment of the luminaire. It also must be corrosion-resistant or protected against corrosion. The luminaire must have an outside surface that is smooth so that it can be cleaned easily and will not collect deposits of foreign materials on the surface. Finally, the wiring methods and materials supplying the luminaire must not be exposed within the cooking hood.

If an inspector finds an installation where the glass covers have been removed from the luminaire, the owner should be notified to have them replaced with covers suited for the light fixture. The covers will prevent grease from accumulating on hot light bulb surfaces.

For additional information, refer to NFPA  $70^{\$}$ , National Electrical Code $^{\$}$ , Article  $4.^{\$}$ 



These in-hood luminaires must meet strict guidelines to prevent a fire.

**Eligible** for Continuing Education Units (CEUs)